

elevations) densely clothed with sandy-white pubescence. Thorax convex, with an irregular longitudinal median impression, on each side of which is a sinuous, raised, smooth line, which branches in front; there are also several smooth raised spots and marks on the disk, and on the sides numerous small round spots. Elytra rugulose, the raised rugæ smooth and shining, the interstices filled with whitish pubescence, but the pubescence does not form any distinct pattern.

Hab. Karachi.

This fine species is about twice the size of the largest of those hitherto described. It appears to be most nearly allied to *J. Whithillii*.

The specimen was sent to the British Museum by the Secretary of the Zoological Society, who received it from Mr. B. Finch with the above-given locality.

BIBLIOGRAPHICAL NOTICES.

Journal and Proceedings of the Royal Society of New South Wales for 1883. Vol. XVII. Edited by Prof. A. LIVERSIDGE, F.R.S. Svo. Sydney, 1884.

ANTHROPOLOGY is represented in this issue by an interesting article on the aborigines inhabiting the great lacustrine and riverine system of rivers and creeks which the Lower Murray takes from Moama to Wentworth, including the Lower Murrumbidgee, Lower Lachlan, and Lower Darling. Seven tribes are here treated of as to characters, features, language, habits, &c. by Peter Beveridge. Astronomy gives us a list of 130 new double stars prepared by H. C. Russell, the Government Astronomer. Hydrology comprises a paper on irrigation in New South Wales by H. C. Russell, who supplies also meteorological observations and a rainfall map; another on water-supply and irrigation in that colony, by A. P. Wood; and on irrigation in Upper India, by H. G. McKinney.

The botanists give the following:—on plants used by the natives of North Queensland, Flinders, and Mitchell Rivers, for food and medicine, by E. Palmer; on *Macrozamia*, by C. Moore; on the roots of the sugar-cane (with two plates), by H. L. Roth; and additions to the list of genera of plants indigenous to Australia, by F. von Müller. The chemistry of Australian products, as collected in abstracts down to 1882, is prepared by W. A. Dixon. A note, by E. H. Rennie, on the discoloration of white bricks made from certain clays in the neighbourhood of Sydney, also refers to chemical investigations.

There are two geological communications. The first is by J. E. Tenison-Woods, on a series of strata hitherto known as the Waianamatta Shales, and supposed to lie above the Hawkesbury Sandstone.

He criticizes the views of former observers, and argues that the shales in question do not lie on the top of the sandstone, but are intercalated with it; that fossil plants of the same genera and species are found in both the shale and the sandstone; and that the former have originated in thick vegetable growths on a land-surface, with or without shallow marshes. The second geological paper is by R. Etheridge, Jun., on Australian *Strophalosia* (Palæozoic), and on a new *Ancella* (*Auc. Liversidgei* vel *hughendensis*) from the Cretaceous rocks of N.E. Australia, noticing also *Inoceramus marathonsis* and another, and *Ancyloceras Flindersi*, and another from the same rocks; two plates illustrate this paper.

The Presidential Address, by Chr. Rolleston, rich with a cordial and philosophical notice of Darwin, his works and views, is not the least interesting of the several good papers in this volume.

Internationale Zeitschrift für allgemeine Sprachwissenschaft.

Edited by F. TECHMER. Bd. i. Hft. i. Leipzig, 1884.

WE have received the first instalment of the new journal of comparative philology, edited by Herr Techmer, with the assistance of a very distinguished company, among which we see the names of Professors Lepsius, Max Müller, Oppert, Potl, Sayce, and Wundt. With such a staff a journal ought to find a wide area of circulation.

The essay which will most interest the readers of the 'Annals' is that by F. Techmer, which deals with the scientific analysis and synthesis of audible language. The earlier portion deals with synthesis from the point of view of the physicist, the latter with the anatomical analysis. The student of works in English will remember that a study of this kind was made by Prof. Max Müller in the second series of his well-known lectures on the Science of Language, wherein one was devoted to the "Physiological Alphabet." Having the two contributions before us as we write, we have to say that the latter essay affords us an excellent example of the great improvements brought about in the last fifteen years in the illustrations of anatomical and physical points.

It is true, indeed, that Merkel's work, from which many of Techmer's figures are taken, was published before Prof. Max Müller's lectures; but this point is really for, and not against, our view, inasmuch as had the standard of illustration been as high in 1870 as it is in 1884 the popular lecturer would have been as well advised as the scientific essayist, and have gone like him to an admirable source of representation.

It would not be right to compare the methods of a lecture delivered before a more or less general audience and the close investigation which is suited to the pages of a journal for specialists.

There is a particularly interesting essay by Mr. G. Mallery on Sign-Language—a subject which has not escaped the American Bureau of Ethnology. It is a mistake to suppose that an Indian cannot rise to the necessities of the situation and invent, when needful, new signs. An instructive proof of this is afforded by Mr.

Mallery, who requested an Indian to make the sign for a steamboat—an object seen for the first time a few days before. “After thinking a moment he gave an original sign, described as follows:—Make the sign for water by placing the flat right hand before the face, pointing upward and forward, the back forward, with the wrist as high as the nose; then draw it down and inward toward the chin; then with both hands indicate the outlines of a horizontal oval figure from before the body back to near the chest (being the outline of the deck); then place both flat hands, pointing forward, thumbs higher than the outer edges, and push them forward to arm’s length (illustrating the powerful forward motion of the vessel).”

The indications given by a notice of these two papers will show that an important addition has been made to the number of scientific journals. Into the purely philological papers it would be improper for us to enter here.

PROCEEDINGS OF LEARNED SOCIETIES.

GEOLOGICAL SOCIETY.

June 25, 1884.—Prof. T. G. Bonney, D.Sc., F.R.S.,
President, in the Chair.

The following communications were read:—

1. “On some Fossil Calcisponges from the Well-boring at Richmond, Surrey.” By Dr. G. J. Hinde, F.G.S.

Numerous specimens of diminutive sponges were met with in a band of calcareous shale in the Richmond well-boring, at a depth of 1205 feet beneath the surface. They proved to be all Calcisponges belonging to Zittel’s family of Pharetrones. Five species, all new, were described, and referred to the genera *Inobolia*, *Peronella*, *Blastinia*, and *Oculospongia*. The spicular structure of the fibres can be seen in microscopic sections of the different species, and in some examples even the spicules of the dermal layer are preserved. From the general facies of the specimens, and the fact that one species is closely allied to *Blastinia costata*, Goldf., from Lower Jurassic strata at Stroitberg, the author thought it probable that the stratum in which the sponges occur is of Lower Jurassic age.

2. “On the Foraminifera and Ostracoda from the deep Boring at Richmond.” By Prof. T. Rupert Jones, F.R.S., F.G.S.

From some strata at three special depths (§ i. 1145’ 9” to 1146’ 6” ; § ii. 1151’ to 1151’ 6” ; and § iii. 1205’) in the deep boring at Richmond, several Foraminifera and Ostracoda have been obtained by Prof. Judd, but they do not present any very special characteristics recognizable as belonging to particular horizons. The Foraminifera comprise several common forms or varieties of *Cristellaria*, *C. rotulata* occurring at each of the depths